

■ Public Health is First.

There are many components needed to build a quality health care system, but public health is the foundation.

To the Kent County Community:

This annual report is the second of what we want to be an ongoing dialogue with our community. Like last year's unprecedented Health of Kent County report, this report is a compelling look at the health status, barriers, and risk factors of the people who make up our community. The news is both good and bad, but moving forward to improve the health of our community begins only by understanding where we are.

With this report we step toward the new public health, a collective and ongoing interaction by which communities might identify problems, make decisions, and take action. With this report we reaffirm both our responsibility and commitment to assess, monitor and diagnose the health status of our community, to report that information in a timely and objective manner, and in doing so provide the foundation for informed community decision-making.

I am pleased to present the 1998 Health of Kent County report.

In Good Health,



Douglas A. Mack, M.D., M.P.H.
Public Health Director



Whether we speak of health on a national or state level, or in the context of the communities where people live, preventing disease and protecting health are fundamental. Cost-effective and efficient, disease prevention in the population collectively is the primary means of assuring health individually. This is public health.

Public health is more than an idea or theory...it is a quest. Public health is about assuring a minimum expectation, and standard, of health for everyone. In order to do so, public health has driven the development of countless technologies — vaccines, sewer and water treatment systems, medical screening procedures. This is public health.

As times change, so do communities. And so too does public health. Where building infrastructure was once our priority, we now search for gaps in those systems through constant and consistent community health assessment. Where once we delivered medical care, we now assure all in our community have access to the medical care system. Where we have always been advocates for sound health policy, we affirm our commitment to leadership. This is public health.

First and foremost.

Kent County Health Department

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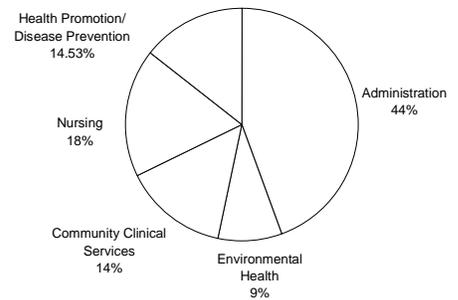
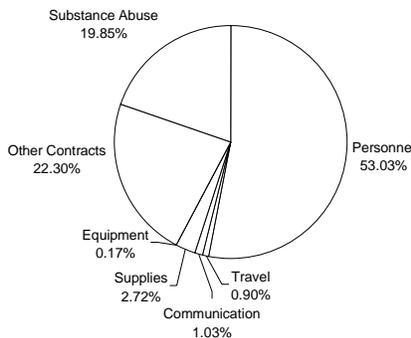
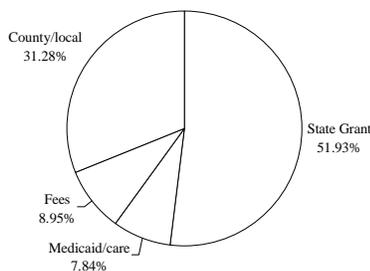
1998 Board of Health

James DeHaan, M.D., Medical Representative, Chair
Commissioner Jack Bolema, District 8, Vice Chair
Commissioner Kenneth Kuipers, District 19
Commissioner Katherine Kuhn, District 14
[Vacant], Community Representative
Douglas Mack, M.D., M.P.H., Public Health Director (ex-officio)

1998 Health Department Administrators

Douglas Mack, M.D., M.P.H., Public Health Director, Chief Medical Examiner
Barbara L. Terry, M.S., Deputy Public Health Director
David W. Smith, M.P.H., Deputy Director for Finance and Contracts
Brenda L. Behm, M.P.H., Planning Administrator
Wanda Bierman, R.N., M.S., M.P.A., Director of Community Clinical Services
David Kraker, R.S., Director of Environmental Health
Carol Vander Wal, M.P.H., Director of Health Promotion/Disease Prevention
Sandra Walls, R.N., M.S.N., Director of Community Nursing Services

Kent County Health Department FY 1998 Revenues and Expenditures



Revenues

State Grant	\$12,809,450
Medicaid/Medicare	1,933,578
Fees	2,207,073
County/Local	7,717,096
Total	\$24,667,197

Expenses by Expense Category

Personnel	\$13,080,220
Travel	222,925
Communication	253,001
Supplies	672,098
Equipment	42,008
Other Contractual	5,500,403
Substance Abuse	4,896,542
Total	\$24,667,197

Expenses by Service Category

Administration	\$10,965,602
Environmental Health	2,162,206
Clinical Services	3,557,801
Nursing Services	4,397,737
Health Promotion/ Disease Prevention	3,583,851
Total	\$24,667,197

■ Introduction

Developing Community Capacity for Health Assessment

The Kent County Health Department, like local public health departments across the United States, is redefining its role in the community to focus more explicitly on community health status assessment. During 1998 the addition and reorganization of staff at the Health Department enhanced capacity for population-based data collection and analysis toward that end. This report, a follow-up and improvement upon last year's Health of Kent County report, is only a first step in our developing process.

Clearly, high quality community assessment is built upon high quality data. While data sources on health status are many and varied, community-based data from organizations and agencies in Kent County have the potential to provide the most accurate picture of the health of people in our community. Working with our community to develop collection strategies and data sets, as well as assuring the integrity of collected data, will be a priority of this health department.

Local avenues for the collection and reporting of information from provider networks, human service agencies and schools are being developed. CATCCH (Community Assessment Technology Changing Children's Health) is a collaboration of the local health systems, public health, education, and human service agencies whose goal is to provide current information related to children's health on a Web-based planning tool created by the Health Forum (The Outcomes Toolkit). The Outcomes Toolkit provides an excellent opportunity to standardize the collection of demographic information, as well as to create indicators based on local "real-time" data.

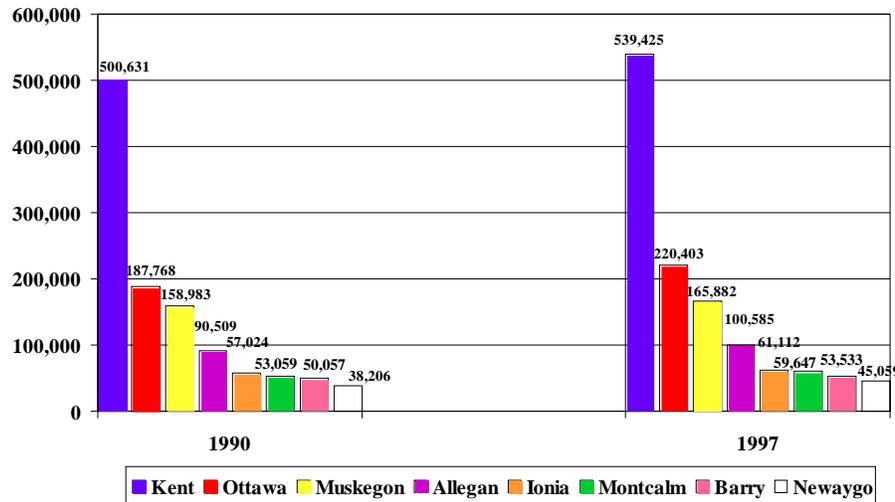
The Kent County Health Department is intent upon improving our ability to report on the health status of all residents of Kent County. This will require a renewed commitment from the public and private sectors to gather this information in ways that allow for valid and reliable aggregation of health and socioeconomic information and at the same time assure absolute confidentiality. Because of either small populations (Asian or Pacific Islander, Native American) or inadequacies in the collection of demographic information (Hispanic), current data for utilization of health services, safety net programs, and mortality are considered unreliable. Working with the community to develop this data locally will allow us to provide Kent County with this information for the first time.

Demographics

Growth in the West-Michigan Area

The U.S. Census Bureau estimates a nearly 10% growth in population since 1990 in Kent and the contiguous 7 counties (Allegan, Barry, Ionia, Montcalm, Muskegon, Newaygo and Ottawa). The State of Michigan grew at a slightly slower pace than the West Michigan area with an overall increase in population of 5%.

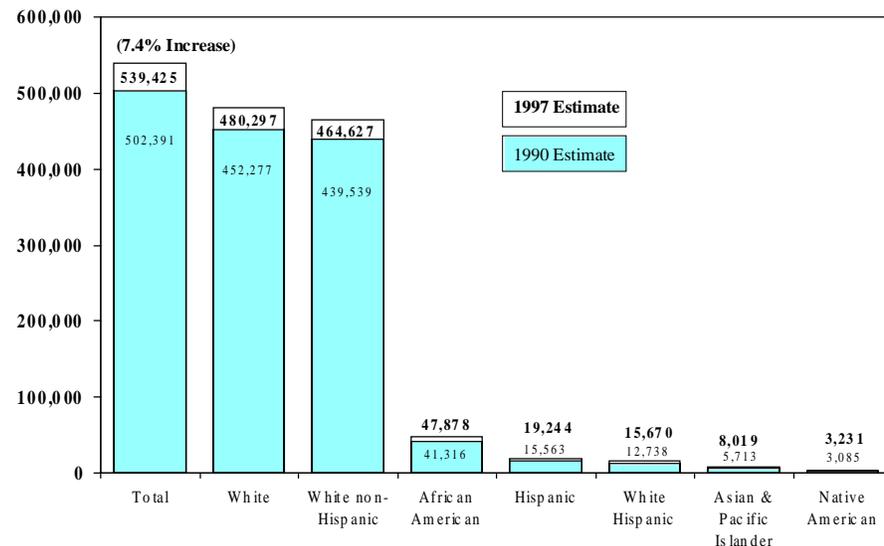
West Michigan Population, 1990 and 1997



Kent County added approximately 38,794 residents since 1990 which represents an 8% increase in population. Surrounding counties with the largest increases in population are Ottawa and Newaygo counties, with 17% and 18% increases respectively. Smaller gains in population were made in Muskegon (4%) and Ionia (7%). Moderate increases were reported for Allegan (11%) and Montcalm (12%) counties.

Changes in Race and Ethnicity

Race and Ethnicity in Kent County (U.S. Census Bureau Estimates)



The largest gains with respect to race in Kent County were for Asian or Pacific Islanders and African Americans. By 1997, persons of Asian or Pacific Island descent represented 1.5% of Kent County residents and experienced a growth of over 40% since 1990. The African American population represents 9% of county residents and experienced a growth of 16% for the same time period. The relatively slow rate of growth in the White population (6% between 1990 and 1997) resulted in a 1.3% decrease in overall population distribution. (The White population represented 90.3% of Kent County residents in 1990 and 89.0% by 1997)

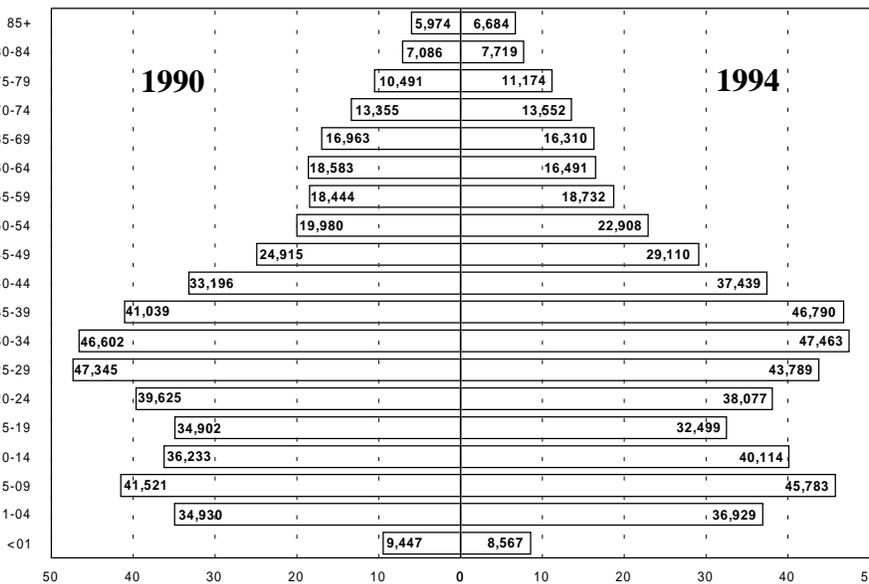
With respect to ethnic origin, persons of Hispanic descent represent just under 4% of Kent County residents. The Hispanic population grew by 24% since 1990, which represents the second largest growth rate without regard to race. Lack of information related to the health status of the Hispanic population continues to be a problem with respect to planning to meet the public health needs of this growing population.

Demographics

Age of the Population

The population is aging; longer life-spans coupled with decreasing birth rates are causing a bulge in the pyramid between 25 and 50 years. This is a general trend for the United States and represents the bulk of the "baby boom" generation of the post World War II period. This generation will present a challenge in funding for Social Security and Medicare. Managing the costs of health care for chronic diseases will play a critical role in assuring health care for older Americans is maintained at current levels into the next millennium.

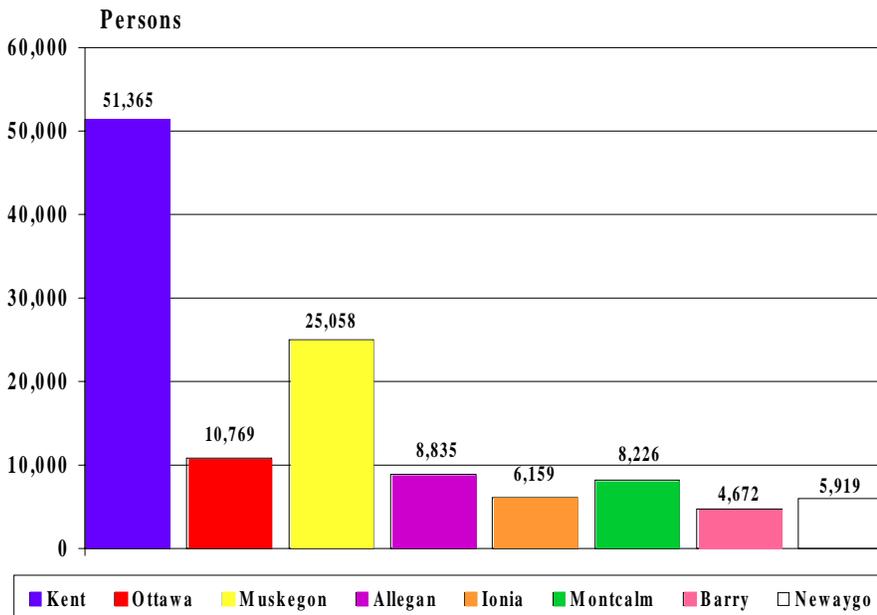
Population Pyramid, Kent County, 1990 and 1994



These changes in the "shape" of the Population Pyramid have also prompted the Centers for Disease Control to implement changes in the standard used to calculate age-adjusted rates. Age-Adjusted rates are used to measure the change in the incidence of disease over time and allow for comparisons across communities with inequities in the spread of their population pyramids. Where age-adjusting is appropriate, the new standard will be used to calculate vital statistic information for Kent County.

Poverty Status - West Michigan

People in Poverty, All Ages, 1995 (U.S. Census Bureau Estimate)



The U.S. Census Bureau estimates that just under 10% of Kent County residents live in Poverty. About half (26,693) of persons in poverty are children less than 18 years old, representing 18% of the total child population. (U.S. Census Bureau estimate)

While Kent County has the largest number of persons in poverty, the percentage of the population in poverty is lower than that in Muskegon (15.4% [+/-2.9%]) and of Muskegon and Montcalm (14.3% [+/-3.1%]) counties. Of counties in the West Michigan area Ottawa, Barry, Allegan and Kent are estimated to have single digit rates of poverty.

Demographics

Public Assistance

In the West Michigan area, based on estimates of persons in poverty, between 38 and 68% of those in poverty access Public Assistance programs (Family Independence Agency, Program Statistics - Fiscal Year 1998). For Kent County 5.6% of the population accessed Public Assistance programs through the Family Independence Agency in Fiscal Year 1998; which represented 58.5% of those in need (30,030 unduplicated recipients, an additional 3,736 persons were denied - 52% of those for failure to comply with procedural requirements).

Poverty and Public Assistance in Region

County	Percent in Poverty	Receive Aid (Any FIA Aid)	Needy With Assistance (Receive Aid/Total Pov.)	As a % of Population (Receive Aid/Total Pop.)
Kent	9.6	30,030	58.5	5.6
Ottawa	5.0	4,068	37.8	1.8
Muskegon	15.4	17,110	68.3	10.3
Allegan	8.8	3,863	43.7	3.8
Ionia	11.0	2,710	44.0	4.4
Montcalm	14.3	4,066	49.4	6.8
Barry	8.7	2,237	47.9	4.2
Newago	13.3	3,584	60.6	8.0

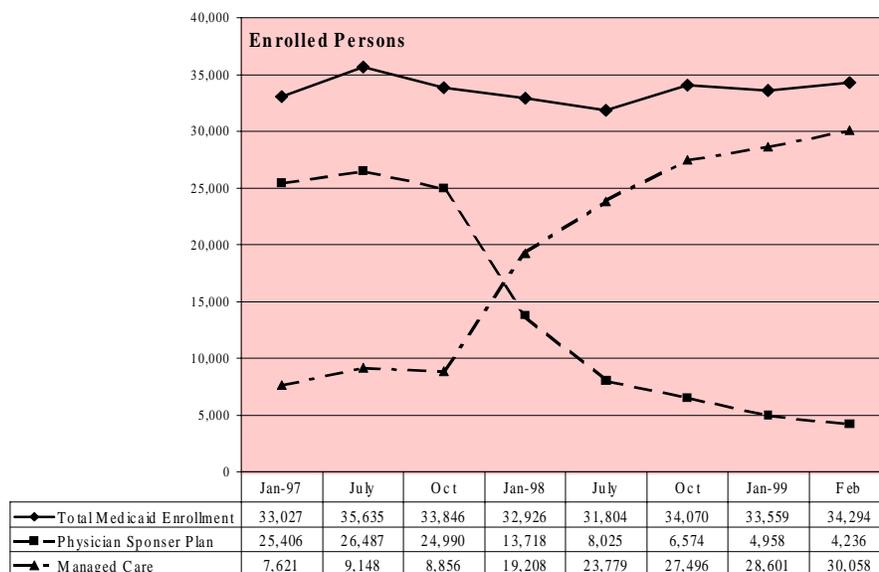
represented 58.5% of those in need (30,030 unduplicated recipients, an additional 3,736 persons were denied - 52% of those for failure to comply with procedural requirements).

Medicaid Enrollment and Managed Care

Currently over 53% of those eligible for Medicaid in Kent County are enrolled, slightly better than Michigan at 48%. Medicaid enrollment has been relatively stable in Kent County since the transition to a Managed Care model of health care. There are currently six Qualified Health Plans delivering health care to Kent County Medicaid Enrollees: Care Choices, Community Choice - Michigan, Priority Health, Community Care Plan, Good Health Plan, and Pro-Care Health Plan. Currently 88% of Medicaid recipients are enrolled in a Managed Care Plan. The Michigan Medical Services Administration projects 100% enrollment by April 1, 1999.

Kent County Health Department is currently contracted to provide Maternal Support Services and Infant Support Services to five of the Qualified Health Plans. WIC, immunizations, and communicable disease control, as well as programs in health promotion, all seem to be ripe areas for Public Health to collaborate with Managed Care.

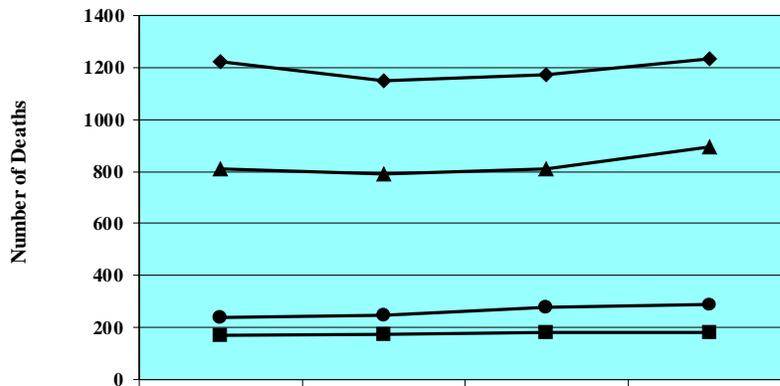
Kent County Medicaid Enrollment (through January 31, 1999)



In allowing for mandatory Managed Care for Medicaid enrollees the Health Care Financing Administration requires that each Health Plan report on an expansive set of indicators of their effectiveness. The Health Employer Data and Information Set (HEDIS) is a standardized data set that allows comparisons between plans. Linking information from the Health Plans to Public Health programs can be a step toward a better understanding of program outcomes and should be a priority area in collaborative efforts.

Community Health Status

Leading Causes of Mortality, Kent County



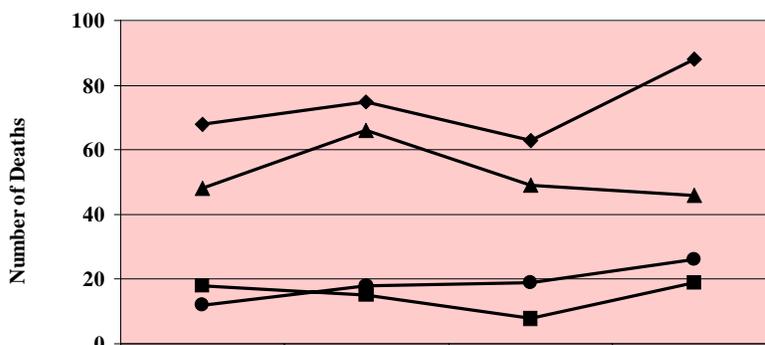
	1994	1995	1996	1997
Heart Disease	1222	1150	1172	1236
Cancer	810	790	809	896
Cerebro-vascular Diseases	239	245	277	288
Pneumonia/Flu	170	172	180	180

Leading Causes of Death

Heart disease, cancer and cerebrovascular disease (e.g., stroke) lead the list of causes of death in 1997 for Kent County residents and together account for 62% of all deaths. Heart disease alone accounts for 31% of all deaths and cancer 29%. Deaths due to pneumonia or influenza accounted for 5% of all deaths in 1997.

Other leading causes of death include chronic obstructive pulmonary disease (COPD, e.g., emphysema) (<5%), all accidents (4%), diabetes (2%), suicide (2%) and homicide (<1%).

Leading Causes of Mortality for African Americans, Kent County

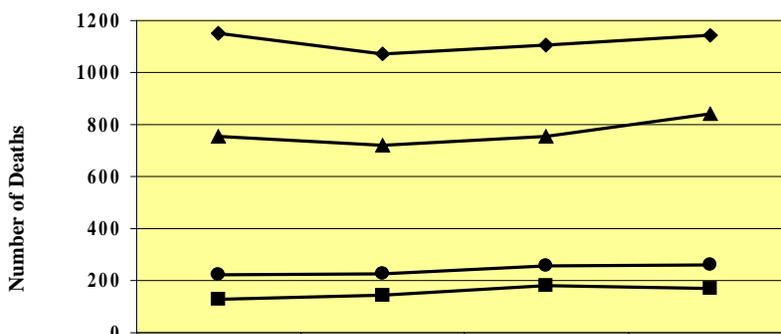


	1994	1995	1996	1997
Heart Disease	68	75	63	88
Cancer	48	66	49	46
Cerebrovascular Diseases	12	18	19	26
Homicide	18	15	8	19

Comparisons between the African American and White populations are difficult due to the limited number of occurrences for some causes of death. Where there are fewer than 20 deaths per year for a given cause of death, associated rates are statistically unreliable.

The three leading causes of death; heart disease, cancer, and cerebrovascular disease are common to all segments of the community with significantly higher overall rates in the White population for; heart disease (White rate = 246.7/100,000; African American rate = 191/100,000); and cancer (White rate = 181.7/100,000; African American rate = 99.8/100,000). Rates for cerebrovascular disease were similar between White and African American populations at 55.9/100,000 and 56.4/100,000 respectively.

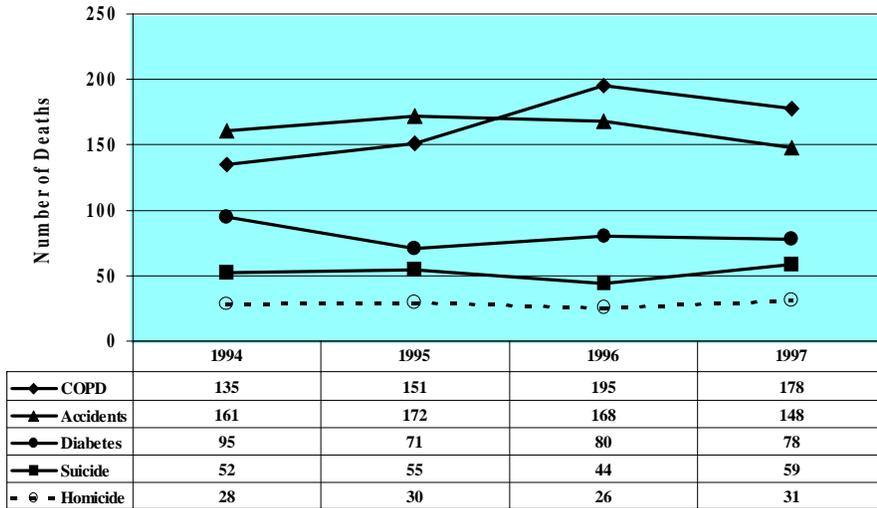
Leading Causes of Mortality for Whites, Kent County



	1994	1995	1996	1997
Heart Disease	1150	1070	1105	1143
Cancer	754	720	753	842
Cerebrovascular Diseases	224	225	256	259
COPD	129	142	182	171

Community Health Status

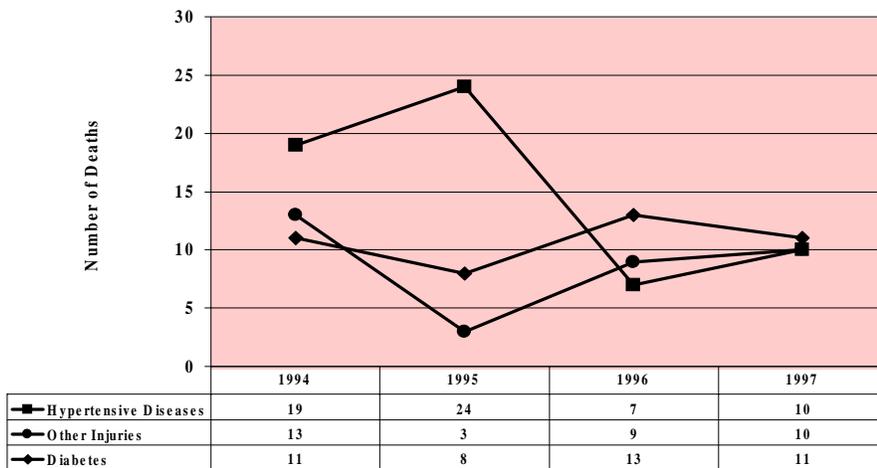
Significant Causes of Mortality, Kent County



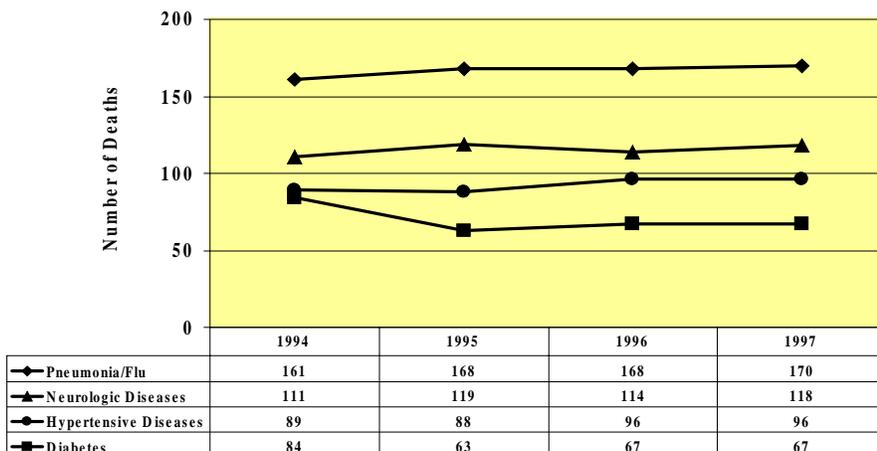
A glaring difference is that homicide ranked as the fourth leading cause of death for Kent County African Americans in 1997, while chronic obstructive pulmonary disease (COPD) ranked fourth in the White population. Homicide rate for African Americans was 41/100,000; approximately 16 times the White rate of 2.6/100,000.

Many factors influence differences between African American and White causes of death. Socioeconomic status and access to care have been shown to account for the largest degree of variability between these populations. Recent studies suggest that physicians are less likely to order more definitive tests of disease in African Americans (e.g., African Americans were significantly less likely than Whites to receive a coronary angiogram to detect coronary artery disease). The Grand Rapids African American Health Institute could play a critical role in devising indicators to monitor issues related to utilization of health care and socioeconomic status of African Americans in Kent County.

Significant Causes of Mortality for African Americans, Kent County

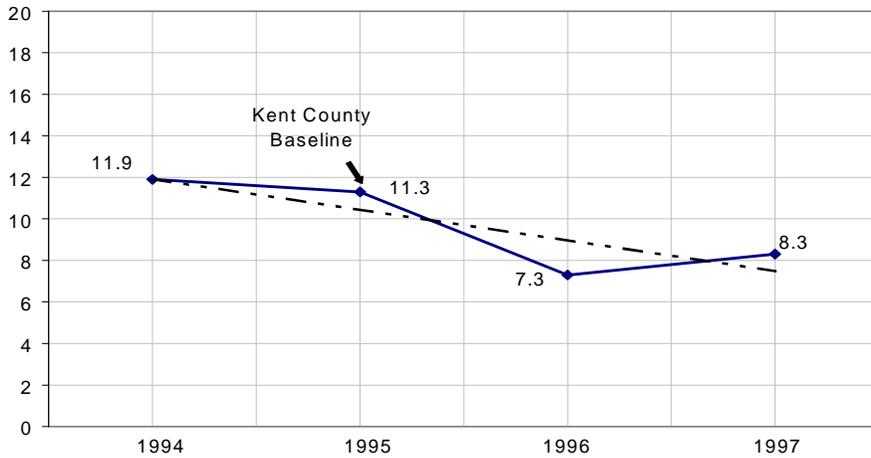


Significant Causes of Mortality for Whites, Kent County



Community Health Status

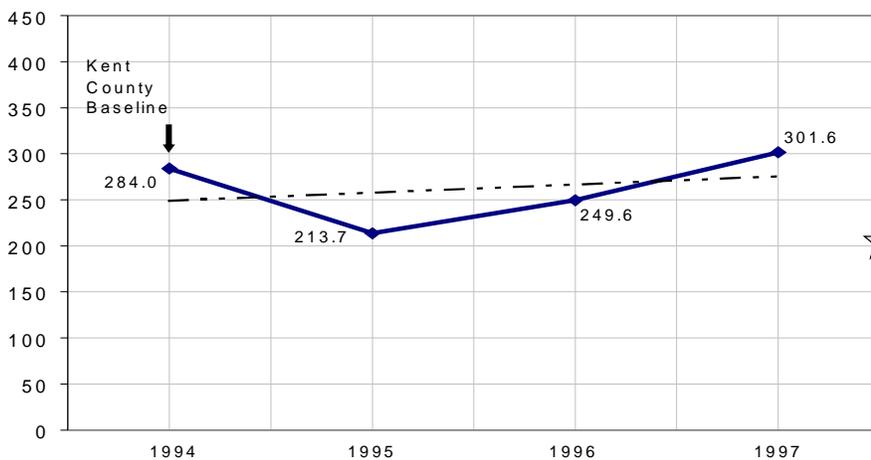
Kent County New AIDS Case Rate



AIDS and Sexually Transmitted Infections

Although the decrease in the new AIDS case rate has been attributed to more effective treatment for HIV, there has also been a decline in the number of HIV cases re-reported. A Year 2000 goal for new AIDS cases was not established because people who will develop AIDS between now and the Year 2000 are likely already infected with HIV, the virus that causes AIDS.

Kent County New Chlamydia Case Rate

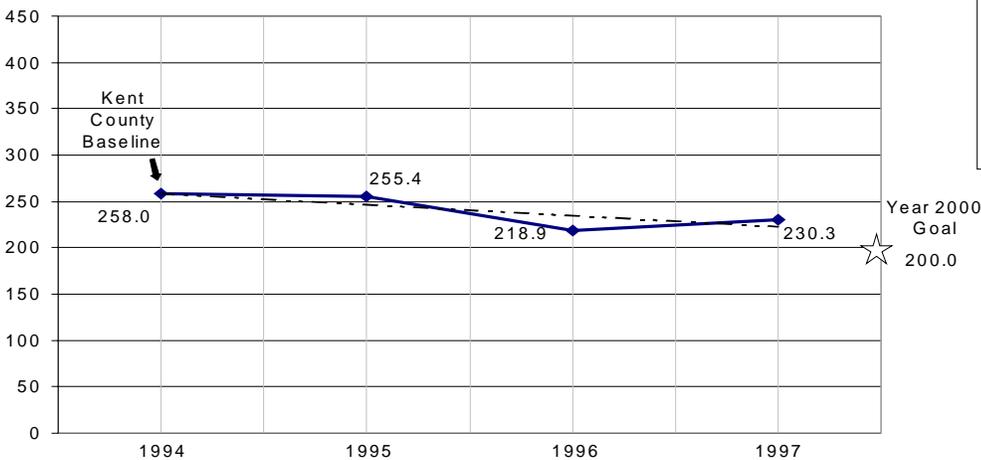


The increase in the new case rate of Chlamydia may be partially explained by better reporting of the disease by health care providers, and improved tests that are more sensitive in detecting the disease.

Year 2000 Goal
200.0

The U.S. Centers for Disease Control and Prevention reports that a variety of national indicators suggest that decreases in the rate of new cases of Gonorrhea that were observed in preceding years may be leveling off.

Kent County New Gonorrhea Case Rate



--- Trendline
 —◆— Actual Kent County Case Rate
 ☆ Year 2000 Goal
 All rates reported are cases per 100,000 Kent County residents

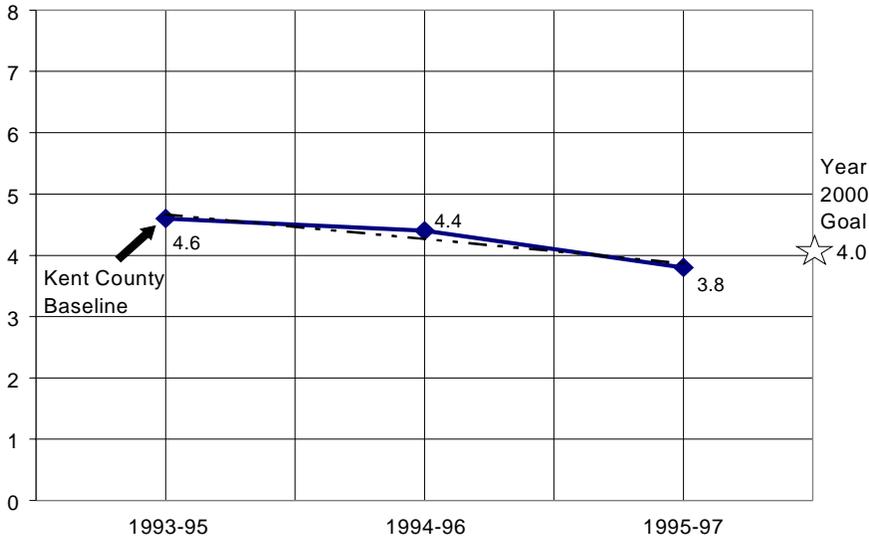
Year 2000 Goal
200.0

Community Health Status

Alcohol-impaired Driving

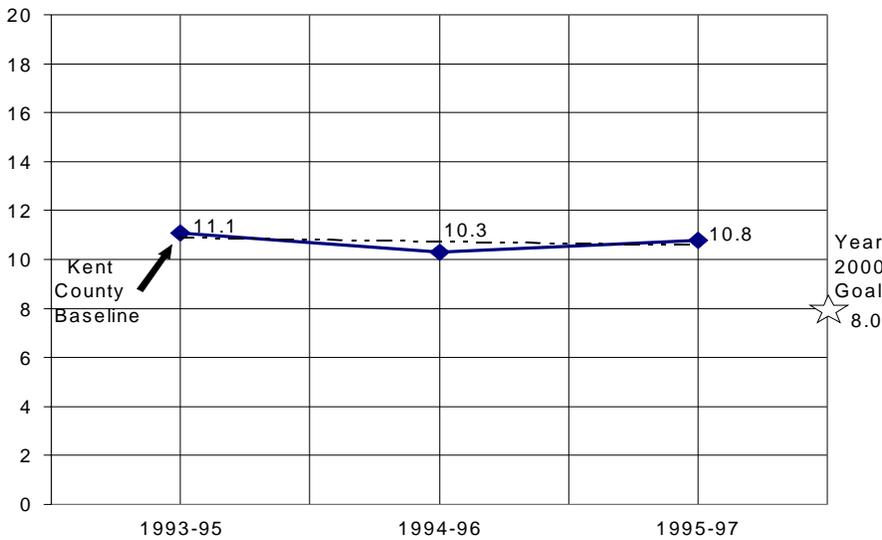
Alcohol impaired driving contributes to a number of preventable premature deaths in Kent County annually. Forty percent of all fatal crashes in Kent County were reported to have involved alcohol. The rate of alcohol-related motor vehicle crash deaths in Kent County decreased from 4.6 per 100,000 in 1993-95, an average of 23 deaths, to 3.8 per 100,000, an average of 20 deaths, in 1995-97.

Kent County Alcohol-Related Motor Vehicle Crash Deaths



There are several initiatives that have focused their attention on preventing alcohol-related motor vehicle crashes in Kent County. The Kent County Health Department has responded to this issue by sponsoring and being involved in a variety of prevention activities. One notable accomplishment was the attainment of alcohol impaired driving prevention funds from the National Highway Traffic Safety Administration. Those funds were allocated to Kent County organizations by members of the Healthy Kent 2000 Substance Abuse Implementation Team.

Kent County Drug-Related Deaths



Drug and Alcohol-Related Deaths

Drug and alcohol-related deaths are another cause of preventable premature deaths in Kent County. Mortality may be the result of chronic use or abuse of substances. The rate of drug and alcohol-related deaths has remained relatively stable, with an average rate of 11 deaths per 100,000 occurring in 1993-95, and a slight decrease in 1995-97.

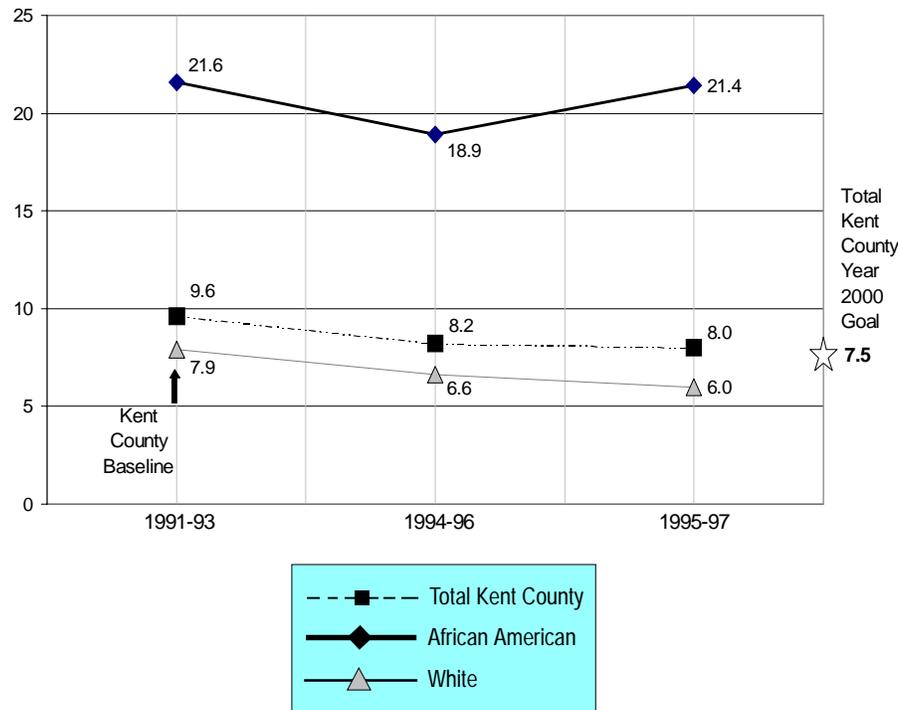
The Healthy Kent 2000 Substance Abuse Implementation Team has also attempted to have an impact on drug and alcohol-related deaths by assessing gaps in substance abuse prevention and treatment services and developing a plan to address the gaps.

Maternal and Child Health

Infant Mortality

Because multiple factors -- prenatal care, birth weight, socioeconomic status, and mothers' health behaviors -- contribute to birth outcome and infant health status, it is difficult to associate any one factor with an increase or decrease in infant mortality. Rates of infant mortality for Hispanics and other ethnic minorities are not included due to the statistical unreliability of collected data according to the Michigan Department of Community Health. The Health Department is currently working to gather data from local health providers to develop a more comprehensive picture of infant health in Kent County.

Infant Mortality in Kent County (rate per 1,000 live births)



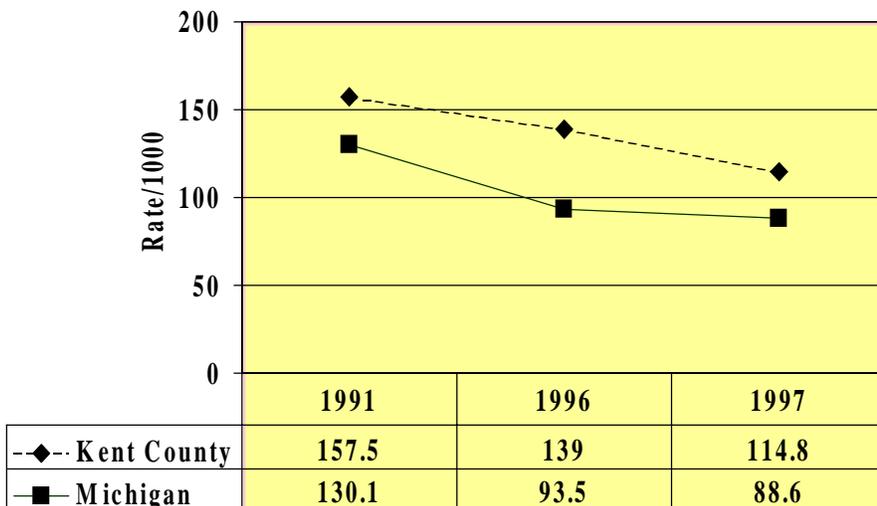
The infant mortality rate measures the number of deaths in infants less than one year of age. Infant mortality in Kent County has been declining since 1991, due in part to a decrease in infant mortality among white infants, as well as a decrease in the number of black live births.

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African American Teen Births

There were 241 births to African American teens in 1997, which equates to a rate of 114.8/1000. This represents a 27% decrease since 1991. While the general trend is positive and speaks to the success of neighborhood level intervention by schools, churches and other outreach groups Kent County African American teen pregnancy rates are still significantly higher than Michigan African American rates.

African American Teen Live Birth Rate (ages 15-19), 1991-1997

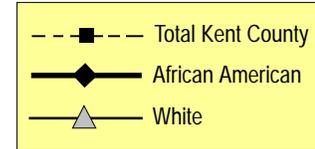
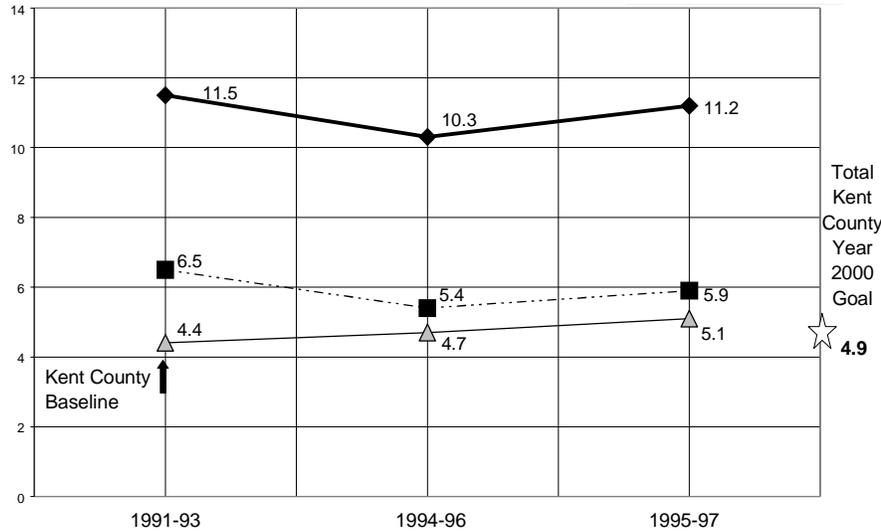


Maternal and Child Health

Low Birth Weight

Infants born weighing less than 2,500 grams (five and a half pounds) are considered to be of low birth weight. Although the total percentage of infants with low birth weight in Kent County has been decreasing since 1991, the percentage of black infants with low birth weight continues to be far greater than the percentage of white infants with low birth weight.

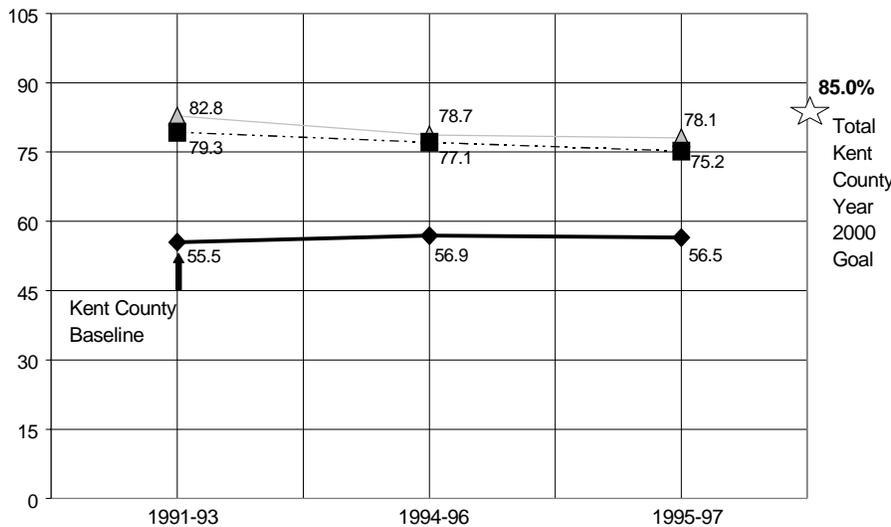
Percentage of Kent County Infants Born at Low Birth Weight



Prenatal Care

Timely prenatal care -- prenatal care begun in the first trimester of pregnancy -- is associated with healthier birth outcomes. During the past six years, black women in Kent County have consistently reported that they receive less prenatal care in the first trimester than white women.

Percentage of Kent County Women Beginning Prenatal Care in First Trimester of Pregnancy



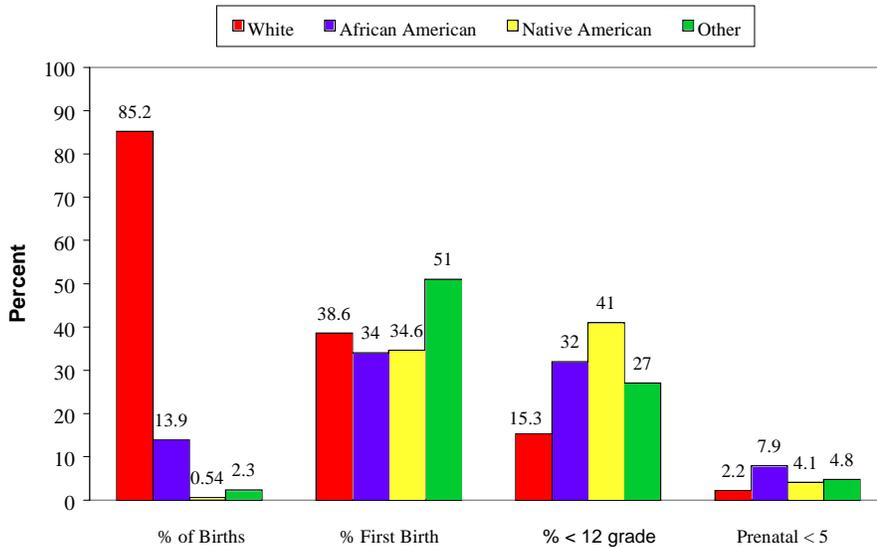
Neighborhood level interventions are necessary to impact some of the variables that influence infant mortality. There have been successful initiatives in the white population that lacked penetration in the African American community. The "Back to Sleep" program has been effective in reducing SIDS (and infant mortality) in the white population. This program is based on research that suggests that infants should be put to bed in the supine position (on their backs). Effectively delivering this message to the African American community should be a priority concern in Kent County and will require expanded collaboration with neighborhood level African American groups.

Maternal and Child Health

Other Birth Indicators

There were 8,998 total births in Kent County in 1997, 85% of those births were to Whites (7,668), 14% to African American mothers (1073), 2% to Asian/Pacific Islanders (190). The 49 births to Native Americans accounted for less than 1% of total Kent County births. Data for the Hispanic population were not released by the Michigan Department of Community Health, and were, for the most part, included in White births.

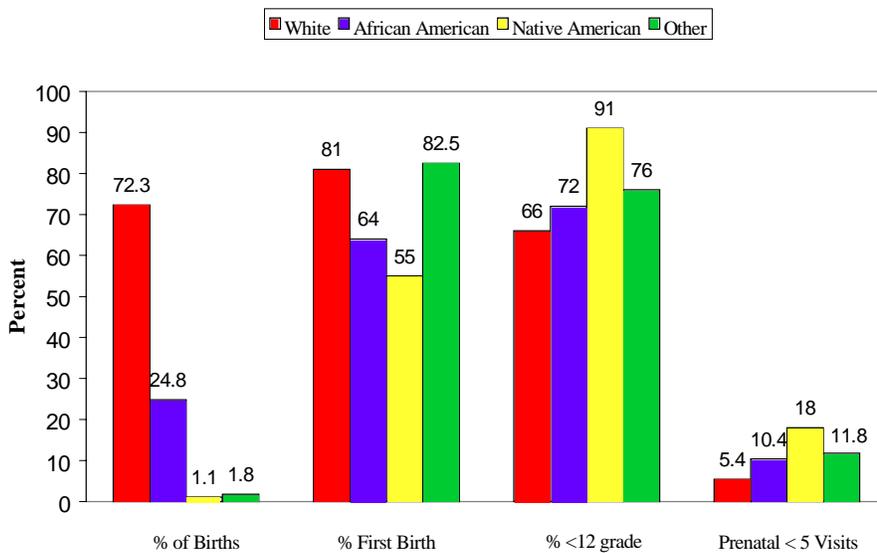
Live Births - Selected Indicators, Kent County 1997



Data for birth indicators show that Native American mothers are encountering significant risks and barriers despite their small numbers overall. Both tables show that Native American women are having babies sooner, are less likely to complete their education, and, as teens, are less likely to access prenatal care. The need to collect local and community-based data about the Native American population is critical.

Likewise, given the size and continued growth of the Hispanic community in Kent County, it is imperative that action be taken by local health systems to improve data collection for this population as well. The ability to deliver necessary public health services to the Hispanic population is dependent upon our ability to understand their current health status, specific barriers to accessing care, and what cultural factors impact both.

Live Teen Births - Selected Indicators, Kent County 1997



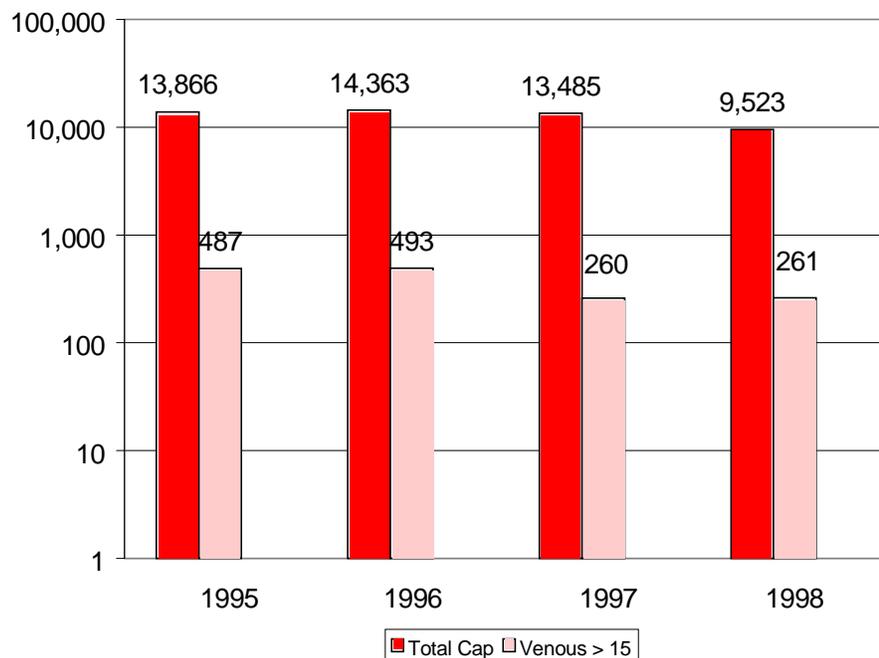
Environmental Health

Health and the Environment

Community health status can be greatly impacted by environmental health. As recently as the early part of the 20th century, infectious diseases associated with poor sanitation and, frequently, vermin, were the leading causes of illness and mortality among Americans. Improvements in environmental sanitation, including closed and engineered sewer systems, vermin control, protection of drinking water supplies, and regulated waste disposal, are regarded as some of the greatest public health accomplishments of this century, and greatly reduced the threat of disease.

Today, environmental sanitation in the U.S. is among the best in the world, and Americans face significantly less risk of disease associated with contaminated water supplies, vermin, or improper waste disposal. With these threats eliminated, chronic diseases are now the leading killers of Americans, as demonstrated elsewhere in this report. Still, environmental health remains critical to the overall health of a community, and today encompasses groundwater concerns, lead hazard reduction, and food service sanitation, among others, in addition to general sanitation.

Blood Lead Draws, 1994-1998, with Venous in Excess of 15 ug/dL.



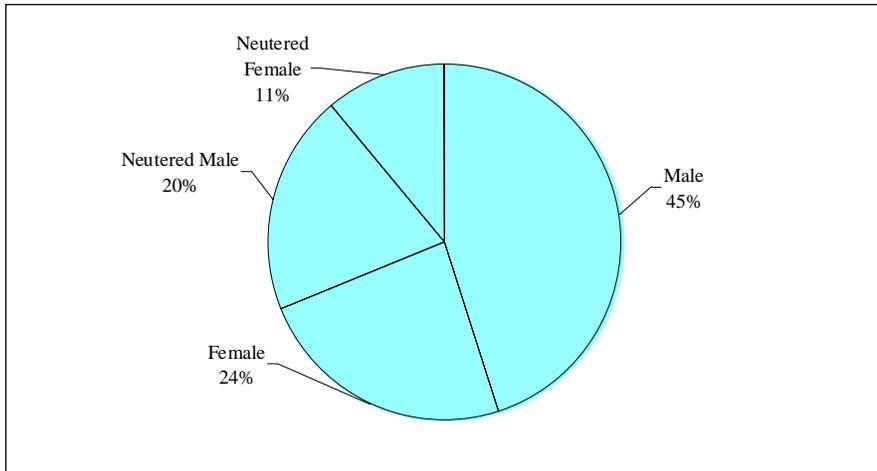
Childhood Lead Poisoning

The Childhood Lead Primary Prevention Project has two primary components: lead poisoning surveillance and primary prevention. The Lead Poisoning Surveillance program is a public health based intervention system that is responsive to the needs of the lead-burdened child and his or her family. The system links local public health nursing and environmental health services, medical intervention services, area housing authorities, and other community health programs. The goal of the Primary Prevention Project is to reduce childhood lead exposure by empowering, educating and assisting homeowners, landlords and tenants to complete basic lead reduction activities.

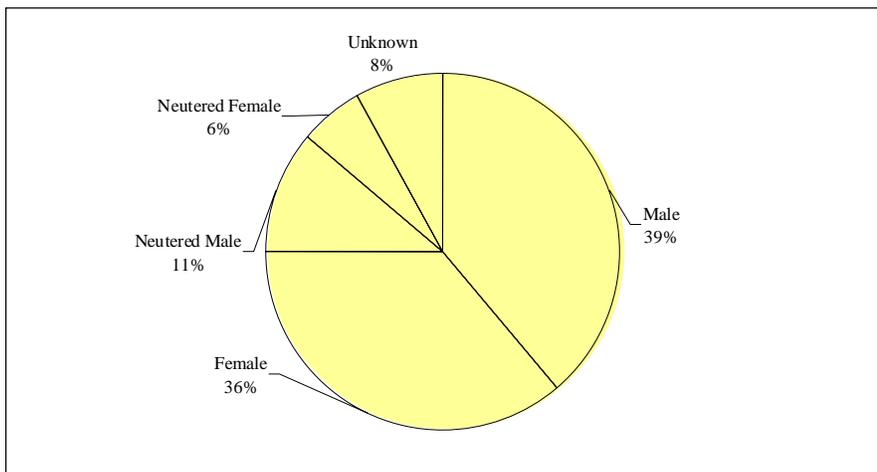
Results of the program from 1994 through 1998 demonstrate that the number of Kent County children identified as having elevated blood lead levels is declining, and lead hazards in the community are steadily being reduced.

■ Environmental Health

Sex of Biting Dogs, January through October 1998, Kent County (Total of 868 Dog Bites Reported)



Sex of Dogs Received at Kent County Animal Shelter, January 1995 through October 1998 (Total of 15,272 Received)



Animal Control

The Kent County Animal Shelter, a section of the Environmental Health Division, is responsible for the enforcement of animal-related matters that impact human health and safety, (e.g. animal bites, diseases) and for the safety and welfare of animals. Animal Control Officers enforce the Kent County Animal Control Regulations, adopted in 1980, under the Michigan Public Health Code, and the state 'Dog Law' which originated in 1919. The Animal Shelter operates a holding facility for dogs, cats, and other non-livestock animals that are temporarily or permanently displaced from their homes. Animal control makes the community safe for human and animal cohabitation by controlling the risk of associated human health hazards and disease.

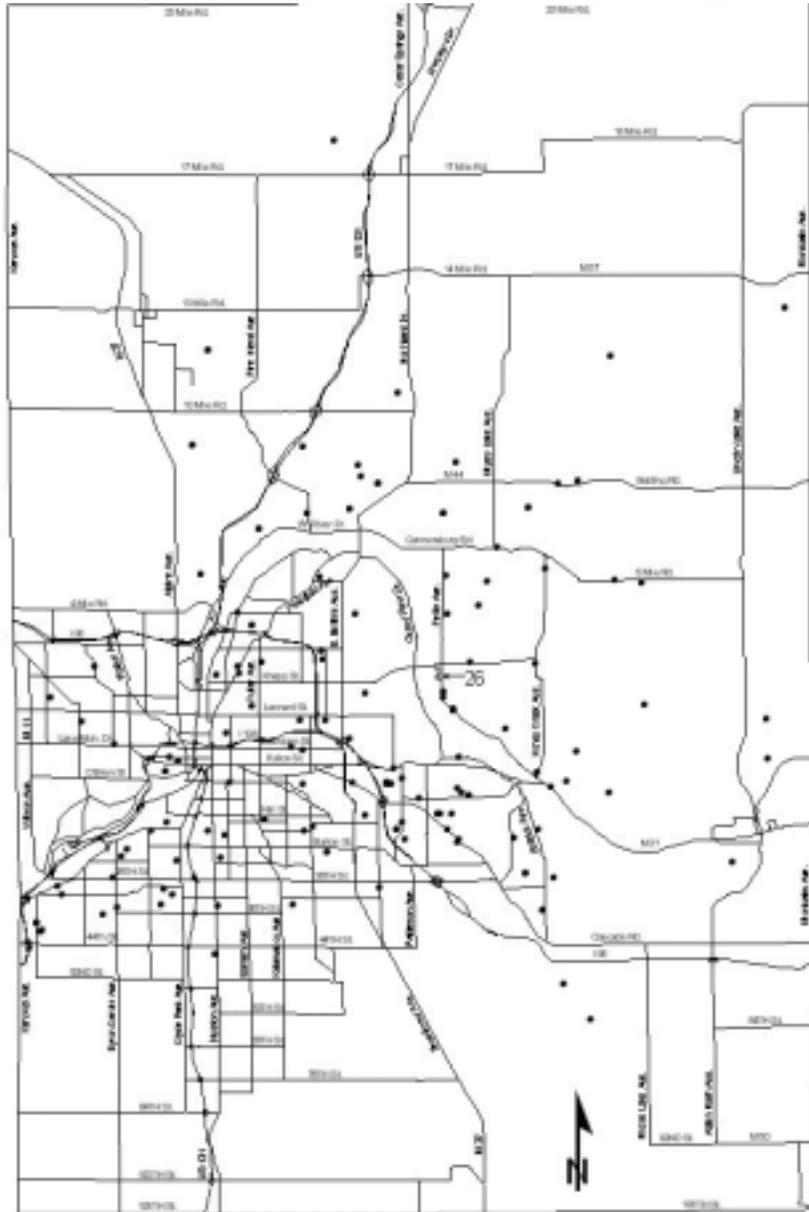
These tables show that neutering plays an important role in animal control, as well as in protecting human health and safety. Neutered animals are less likely to bite and are less likely to come into the Animal Shelter, whether through being given up or being picked up stray.

Mapping Radon Gas in Kent County

Radon is a colorless, odorless, radioactive gas which can seep into homes through cracks in foundations, walls, and dirt-floored crawl spaces. Long-term exposure to radon can increase the risk of lung cancer, and, according to the National Cancer Institute, causes some 17,000 cases of lung cancer a year in the U.S. Testing a home for radon is a simple and inexpensive procedure, and the Health Department makes radon test kits available to homeowners wishing to test their homes for a nominal fee. The Environmental Health Division continues to build a geographic data base for radon in Kent County. Locations of home radon tests which found radon in concentrations in excess of 4 picocuries per liter of air (4 pCi/l) are shown on the Kent County map on the following page. Just under 19% of the test records in the radon data base shown results over 4 pCi/l (198 of 1057 total records). However, there is no discernible pattern to radon, and radon levels can vary greatly from one house to the next. Continued testing will enhance understanding of the scope of radon in Kent County.

■ Environmental Health

Radon Map of Kent County for Home Test Results >4 pCi/l



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or toll-free from anywhere in the 616 area code 1-888-515-1300
Fax: 336-3884

Community Relations: 336-2220

Community Clinical Services: 336-3962
Fax: 336-4915

Community Nursing Services: 336-3040
Fax: 336-3983

Environmental Health: 336-3089
Fax: 336-2436

Health Promotion/Disease Prevention: 336-3037
Fax: 336-3844

Immunization: 336-2233

WIC: 336-3011

AIDS Information Line: 336-3602

Communicable Disease/TB Unit: 336-3425

Outreach Unit Hotline: 1-800-301-1733

**The Health of Kent County, 1998
Annual Report to the Community**

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Notes on this PDF publication:

The report contained in this PDF file was published in print by the Kent County Health Department in April 1999. The PDF version of this report was produced in October 1999. The colors used on many of the graphics in this PDF file vary from the colors used in the printed version, however the content is identical, with the exception of this paragraph. Some graphics remain uncolored due to limitations of the software used to create them. The typeface used in the letter of transmittal on page one of this version is different than the typeface used in the printed version. Page 18 of this file is the front cover of the report; this page is the last page. The content of this report is public information and may be downloaded, stored, printed, copied, and distributed, in print or via e-mail or other electronic means, without prior permission of the Kent County Health Department.
The Health of Kent County 1998 Annual Report to the Community
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